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EXAMINER

PATEL, GAUTAM

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 05/02/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.
09/480,107

Applicant(s)

Park

Examiner

Gautam R. Patel

Art Unit

2655



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 21, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Feb 4, 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
~~If approved, corrected drawings are required in reply to this Office action.~~ CR
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 11 6) ☐ Other:

Response to Amendment

1. This is in response to amendment filed on (Paper #12).
2. Claims 1-29 remain for examination. Claims 24-29 are newly presented for examination.

REMARKS/NOTES

3. The "Official request" for interview was fulfilled on 4-21-03. It is suggested that in future it would be more advantageous and speedy to request interview on phone rather in remarks.

DRAWINGS

4. Applicant's correction of drawing filed on 2-4-02 has been **approved**, and drawing objection has been **withdrawn**.

35 U.S.C. § 112

5. Applicant's arguments regarding rejection of claims 1-23 under 35 U.S.C. § 112 second paragraph have been fully considered and rejection of claims 1-23 under 35 U.S.C. 112 first paragraph has been **withdrawn**. However new 112 follows on new claims.

Claim Rejections - 35 U.S.C. § 112

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 25-26 and 28-29 rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. How resetting is providing compatibility between a file system and a driver accessing the recording medium, which is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). No explanation has been given as to how this, formatting and/or resetting step provides compatibility between a file system and a driver accessing the recording medium. The specification [page 9, lines 13-15 and lines 5-10 and 14, lines 6-14], simply states that "the present invention is to solve at least the problems and disadvantages of the related art." [page 9, lines 13-15]. Specification does not even mention which particular problem of the prior art is solved, and more importantly HOW it is being solved. Page 14 simply says supplementary spare area is being reset when the optical recording medium is formatted. This allows the judgments of the file system and the driver regarding the supplementary spare area to match, thereby leading to a consistent system control" [page 14, specification]. This paragraph also does not explain HOW formatting helps comparability. These are desired goals NOT how they are being performed.

NOTE: Also it should be pointed out that Bish clearly discloses all these steps of formatting and resetting

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-21 25-26 and 28-29 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bish et al., US. patent 5,235,585 (hereafter Bish).

As to claim 1, Bish discloses the invention as claimed [see Figs. 1-9] including resetting a location information of spare area and converting spare area to user area, comprising the steps of:

- a. resetting [by doing surface analysis] the stored location information of a supplementary spare area [secondary storage regions] to a predetermined reset value [Bish's 'predetermined reset value' is null value or zero value] in response to formatting request [col. 4, lines 15-39; and col. 5, line 54 to col. 6, line 13], the location information of the supplementary spare area indicating a location of the supplementary spare area on the optical recording medium and a size of the supplementary spare area [col. 6, lines 13-61]; and
- b. formatting the optical recording medium in response to the formatting request [col. 5, line 54 to col. 6, line 13; specifically col. 5, lines 54-61];

NOTE: The size of the sectors [1024 or 512] defines the size of the supplementary spare area [secondary storage regions] and sectors numbers and addresses indicates location information.

7. As to claim 2, Bish discloses:
determining if a supplementary spare area has been assigned [surface analysis] prior to said resetting step (a) and said formatting step (b), wherein said steps (a) and (b) are performed if a supplementary spare area has been assigned [col. 5, line 43 to col. 6, line 24 and col. 9, line 54 to col. 10, line 45].
8. As to claim 3, Bish discloses:
said resetting step (a) comprises converting the location information [address] of the supplementary spare area to predetermined reset value, thereby erasing [col. 6, lines 2-3] any previously stored location information [col. 5, line 65 to col. 6, line 13 and col. 9, line 54 to col. 10, line 45].
9. As to claim 4, Bish discloses:
the predetermined value is a lowest value [col. 6, lines 25-30].
10. As to claim 7, Bish discloses:
said formatting step (b) includes registering sectors judged to have defects into a new PDL (primary defect list), if the optical recording medium s to be formatted with certification [validation] [col. 9, line 52 to col. 10, line 45 and fig. 9].
11. As to claim 8, Bish discloses:
said formatting step (b) includes registering all sectors previously registered in an old SDL (secondary defect list) into new PDL, if the optical recording medium s to be formatted without certification [validation] [col. 9, line 52 to col. 10, line 45 and fig. 9].
12. As to claim 9, Bish discloses:
the location information of the supplementary spare area is stored in a SDL block [fig. 4] of a DMA of the optical recording medium [col. 6, lines 25-61]

13. As to claim 10, Bish discloses:
the location information includes start [start-pointer] and end [end-pointer] addresses of the supplementary spare area on the recording medium [col. 9, line 40 to col 10, line 8].
14. As to claim 11, Bish discloses:
said formatting step (b) further includes disposing an old SDL existed prior to said formatting step (b), if the optical recording medium is to be formatted with certification [validation] [col. 9, line 40 to col 10, line 8].
15. As to claim 12, Bish discloses:
said formatting step (b) reformats the optical recording medium by moving defective sectors registered in a first list to a second list [col. 9, line 52 to col. 10, line 45 and fig. 9].
16. As to claim 13, Bish discloses:
the first list and second list are, respectively, an SDL (secondary defect list) and a PDL (primary defect list) for the optical recording medium [col. 9, line 52 to col. 10, line 45 and fig. 9].
17. As to claim 14, Bish discloses:
 - a. Receiving an instruction to format the recording medium [col. 5, lines 54-64];
 - b. Resetting a location information stored on the recording medium in response to the instruction [col. 5, line 54 to col. 6, line 24]; and
 - c. Transferring secondary defect information with a new PDL to format the recording medium according to instruction [col. 5, line 54 to col. 6, line 24; and col. 6, line 62 to col. 7, line 6].
18. As to claim 15, Bish discloses:
registering sectors judged to have defects into new PDL if the recording medium is to be formatted with certification [col. 3, lines 42-54; col. 5, line 65 to col. 6, line 12 and col. 7, line 47 to col. 8, line 30].
19. As to claim 16, Bish discloses:
disposing an old SDL of the secondary defect information if the recording medium is to be formatted with certification [col. 7, lines 7-46]
20. As to claim 17, Bish discloses:
registering all sectors previously registered in an old SDL of secondary defect information into the new PDL if the recording medium is to be formatted without certification [col. 8, line 60 to col. 9, line 22 and col. 9, line 52 to col. 10, line 45 and fig. 2 and 9].

21. As to claim 18, Bish discloses:
the location information of the supplementary spare area is stored in a SDL blocks of a DMA of the recording medium [col. 6, line 31 to col. 7, line 26 and fig. 4]
22. As to claim 19, Bish discloses:
the location information includes start [start-pointer] and end [end-pointer] addresses of the supplementary spare area on the recording medium [col. 9, line 40 to col 10, line 8].
23. As to claim 20, Bish discloses:
converting the location information of the supplementary spare area to a predetermined value [col. 6, lines 2-3].
24. As to claim 21, Bish discloses:
the predetermined value is a lowest value, a highest value, or a predetermined code [col. 6, lines 25-30].
25. As to new claim 25 and 28, Bish discloses:
resetting is performed so as to provide compatibility between a file system and a driver accessing the recording medium upon formatting of the recording medium col. 5, line [col. 5, line 54 to col. 6, line 13; specifically col. 5, lines 54-61].
NOTE: These claims simply states the desired **result** of the action of formatting. Since Bish clearly discloses formatting by definition he is achieving the desired result. Also see 112 first above.
26. As to new claim 26 and 29, Bish discloses:
the resetting [by doing surface analysis] is performed so as to provide compatibility between different drivers when the different drivers are used to access the recording medium upon formatting of the recording medium [col. 4, lines 15-39; and col. 5, line 54 to col. 6, line 13].
NOTE: These claims simply states the desired **result** of the action of resetting. Since Bish clearly discloses resetting by definition he is achieving the desired result. Also see 112 first above.

Claim Rejections - 35 U.S.C. § 103

27. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

28. Claims 5-6, 22-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bish as applied to claims 1-4, 7-21 25-26 and 28-29 above.

Regarding claims 5-6, Bish discloses that the predetermined value is a lowest value [col. 6, lines 25-30], or sectors are listed in ascending order. Bish does not specifically disclose that the predetermined value is a highest value or predetermined value is a specific code based upon a predetermined agreement. The limitation in claims 5-6 do not define a patentable distinct invention over that in Bish, since both the invention as a whole and Bish are directed to assigning the sectors in order they are available and choose sectors which are near to the original sector thus keeping track movement to minimum for saving time. The value that is chosen highest, lowest or some predetermined value is inconsequential for the invention as a whole and presents no new or unexpected results, so long as the supplementary spare area is reset and used again. Also Bish clearly indicates that -- "the replacement list has been sorted in the ascending order, but it will be appreciated that the replacement list may be sorted in other orders, for example, descending order." [col. 10, lines 57-60]. Therefore, to have predetermined value to be highest, lowest or based on specific code in Bish would have been routine experimentation and optimization as taught by Bish, in the absence of criticality.

29. Regarding claims 22-23, Bish discloses the transferring and resetting steps. Bish also discloses that sectors are listed in ascending order according to track and sector numbers [see col. 6, lines 25-30]. Bish does not specifically disclose that the resetting step is performed first or second as compared to transferring

step. The limitations in claims 22 and 23 do not define a patentable distinct invention over that in Bish since both the invention as a whole and Bish are directed to assigning the sectors in order they are available and choose sectors which are near to the original sector thus keeping track movement to minimum for saving time. The order in which the transferring or resetting takes place presents no new or unexpected results. Also Bish clearly indicates that "the replacement list has been sorted in the ascending order, but it will be appreciated that the replacement list may be sorted in other orders, for example, descending order. [col. 10, lines 57-60]. Therefore, to have any order in which to transferring and resetting steps are done in Bish would have been routine experimentation and optimization as taught by Bish, in the absence of criticality.

30. Claims 24 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bish as applied to claims 1-23 25-26 and 28-29 above, and further in view of AAPA (Applicants Admitted Prior Art) (specification pages 1-9 and figs. 1-5B (hereafter AAPA).

As to claim 24 and 27, Bish discloses:

the supplementary spare area is assigned a variable size [sectors stores 1024 or 512 bytes] [col. 6, lines 13-68].

Bish discloses all of the above elements, including assigning variable size to spare areas. Bish does not specifically discloses that spare are is located close to a lead-out area to the extent claimed.

However, it is well known in the art that placing spare area is a matter of system design and spare area is placed where it is most convenient and has easy access is a matter of choice and it is generally allocated in each zone or group.

Also AAPA clearly discloses

supplementary spare area is located close to a lead-out area of the recording optical medium [page 5-6, specification. Both Bish and AAPA are interested in improving the arrangement of the disc areas in most efficient way.

Therefore, one of ordinary skill in the art at the time of invention would have realized that the placement of the supplementary spare area is not critical to over scheme of things and can be placed where it is most convenient. It would have been obvious to have placed supplementary spare area close to a lead-out area in the system of Bish as taught by AAPA because one would be motivated to arrange spare area in most efficient way in the system of Bish and provide better access to the supplementary spare area.

Bish was cited as prior art reference in paper no. 3, mailed 10-3-01.

31. Applicant's arguments filed on 3-3-03 (Paper # 12) have been fully considered but they are not deemed to be persuasive for the following reasons.

32. In the REMARKS, the Applicant argues as follows:

A) That: "Bish et al's surface analysis then deals with erasing the user/spare area, but has nothing to do with erasing (resetting/converting) the stored location information of the supplementary spare area." [page 10; para. 1; REMARKS].

Nothing can be further from the truth. Bish clearly indicates that he is "updating" [col. 5, lines 54-64] [which is resetting AND converting] and **creating** a DDS and PDL. After that Bish shows in detail how this done.

B) That:.."Bish et al., including this cited portion, does not teach anywhere that the location information of the supplementary area is converted to a lowest value or reset the stored location information in response to a formatting request/instruction."[page 10-11; para. 4 and 1; REMARKS].

There seems to be problem of semantics here. The Applicants are correct that Bish does not use words "location information", however is using word placing sectors in ascending order. One cannot put anything in nay ascending or descending order without knowing the address information. So by definition he has address information. Now address information is also called "location information". So by definition Bish has location information.

C) That: "the portion cited by the Examiner merely teaches an assignment of a replacement sector for a defective sector, and does not teach the transfer of registration information of sectors from the old SDL into new PDL, as required by claim 17." [page 11; para. 2; REMARKS].

Bish clearly discloses this in cited area. However Bish also indicates that he is already converting SDL to PDL that is covered in claims above [col. 5, lines 53-64]. Cited portion covers added limitation. Also see lines [col. 8, line 60 to col. 9, line 22] for further evidence of this fact. And also original cited area [col. 9, line 52 to col. 10, line 45 and fig. 2 and 9]

D) That: "Further there is no motivation to modify Bish to render these claimed features obvious since Bish et al. is not concerned with resetting the location information of the supplementary spare area in response to a formatting request/instruction.

FIRST: Bish showing resetting etc has been covered in arguments above see paragraph 32, sections A) to C) above.

SECOND: As to obviousness and motivation argument, it should be pointed out that the test of the obviousness is:

"whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention,". As shown in *In re Gorman*, 933 F. 2d at 986, 18 USPQ2d at 1888.

Subject matter is unpatentable under section 103 if it "'would have been obvious to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, **it is not necessary that the cited references or prior art specifically suggest making the combination.**" As shown in *In re Nilssen*, 851 F. 2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988).

Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses." As shown in *In re wood*, 599 F. 2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979).

"In sum, **it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found *in* a specific reference.**" As shown in *In re Oetiker*, 24 USPQ2d 1443 (CAFC 1992).

Accordingly, Bish is not required to disclose or specifically suggest particular elements. Instead the measure is what the teachings of Bish would suggest to one of ordinary skill in the art, **not** what Bish specifically suggests.

E) That: "To give weight, then such advantageous features of Applicant's invention are presented in dependent claims 25-26 and 28-29" [page 13, para. 1; REMARKS].

See new rejection of new claims 25-26 and 28-29, supra.

33. Applicant's amendment and new claims necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

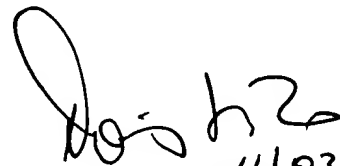
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



Gautam R. Patel
Patent Examiner
Group Art Unit 2655

April 26, 2003



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